

# Paper Quality Requirements For Printing VIS-A-VIS Developments in Paper Making

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***ABSTRACT:** - Developments in microelectronics and other transmission systems have brought in tremendous developments in graphic communications too. The Non-Impact Printing (NIP) techniques like Thermal printing, Ink-jet printing, Magnetic printing and Laser printing etc. are the off-shoots of these developments. These NIP techniques requires certain special properties in the substrate i.e. the paper. The paper deals with some of the critical parameters/properties required for these printing grades of paper. Some of the developments in paper making useful in meeting the twin objectives of quality upgradation and customer satisfaction are also discussed in this article.*

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## INTRODUCTION

Developments in micro electronics, data compression lasers, laser diodes, charge coupled devices and other transmission systems have brought in tremendous developments in graphic communications too. Information generated and transmitted using digital signals is efficiently converted with Non Impact dot matrix system. Non Impact systems like thermal, ink-jet, electro sensitive etc use dot matrix printing technologies. (1) Non-impact printing technology has gained momentum in recent years due to improvement in reliability and quality of printing. This has its own impact on the paper making. Besides meeting general high order of strength and optical characteristics, the paper has to satisfy certain functional properties. Though Indian Paper Industry is bogged down with scarce suitable raw material, these challenges from modern printing technology can suitably met by modifying/ upgrading the paper making process. So modernisation and upgradation of process is the need of the hour. Some of the proven technologies to meet the twin objectives of

quality improvement and customer satisfaction include:

- \* Twin wire Former,
- \* Use of speciality chemicals/ additives for optimum print quality,
- \* Alkaline Paper Making,
- \* Development of computer aided process control techniques.
- \* Soft Nip Calendering etc.

The principles of different NIP techniques and the requirements of the paper for these techniques and also how these can be achieved through modification of paper making process are discussed in this article.

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